# **Connecting to REA Data & Terminal Services through Remote Desktop**

## **Collaborator Access**

Collaborator access to Terminal Services is only available while an REA is under review. Access will be terminated when the REA data are released to the public. Collaborators should then use Public access to the data and maps.

To access ESRI ArcGIS Desktop applications through Remote Desktop, follow the steps provided below. Once you login into Remote Desktop, you will have access to ArcMap, ArcCatalog, and Windows Explorer applications, through which you can access:

- Data layers (.lyr)
- Metadata (.xml)
- Maps (.mxd)
- Models in Toolbox (.tbx) and/or Python Script (.py)
- Map Services (https), and
- Supporting documents for data, maps, and models (.pdf, .pptx, .docx, .xlsx).

NOTE: Collaborators must have a DOI Windows Active Directory login to access this site. Non-BLM collaborators of the REAs (e.g., state government personnel, other federal agencies) should contact their Assessment Management Team (AMT) lead to request access to this site.

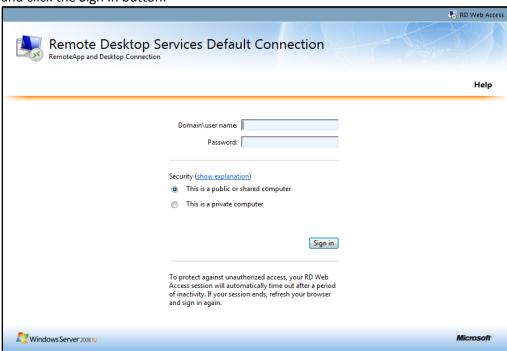
# **Connecting via Remote Desktop**

1. Open Internet Explorer on your workstation using the following URL: https://www.landscape.blm.gov/RDWeb

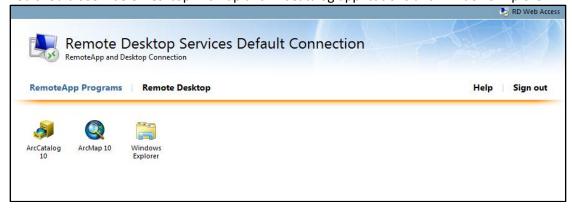
The only supported browser for accessing Remote Desktop on the REA External (DMZ) is Microsoft Internet Explorer at 6.01 or greater. This is due to Remote Desktop requiring an Active X client. Native Firefox and Chrome do not support ActiveX, however there are plugins that you may use at your own risk.



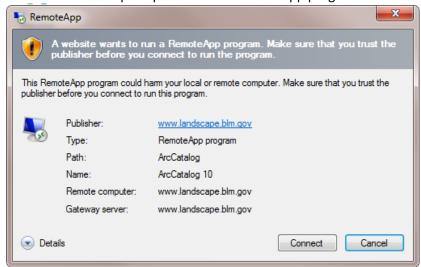
2. **Enter the login credentials** provided to you by the REA's Assessment Management Team Lead and click the Sign In button:



3. You should seeArcGIS Desktop ArcMap and ArcCatalog applications and Windows Explorer.



4. **Click Connect** when prompted to run a RemoteApp program.



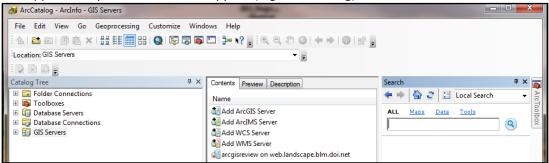
5. Enter the same credentials when prompted by Windows Security **EXPECT insert "localhost\" as** a prefix to your User Name.



6. Click OK when the Warning Box appears.



7. The application you clicked should appear (e.g., ArcCatalog).



- 8. **Users who log in for the first time**, must change their password *manually* upon initial login using the following steps. (You will not be automatically prompted to change your password.) Skip this step if you have already connected to this application.
  - a. Select any application (i.e. ArcMap, ArcCatalog, Windows Explorer).
  - b. After the application comes up, hit CTRL-ALT-END.
  - c. In the RemoteApp Started screen there are two choices. Select Change a password...
  - d. A password dialog will appear prompting you for:

Username (NOTE: the username should follow the format of "localhost\<your username here>" without the quotes...see below)

Old Password

**New Password** 

Confirm Password

- e. Enter the new information accordingly and **click** the arrow after the **Confirm Password** text box.
- f. The password should be changed successfully.



9. The first time accessing the Remote Desktop applications will require a **setup of ArcCatalog** (see next section) to connect to the data sources. In subsequent sessions, you may access your desired application.

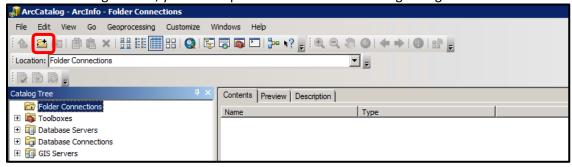
# **Set Up ArcCatalog for REAs**

### **Connecting to Maps and Data**

1. Open ArcCatalog: WARNING: You may receive an initial Security Window as show below. Check the box for "Do not ask me again for this site>", and select Block Access.

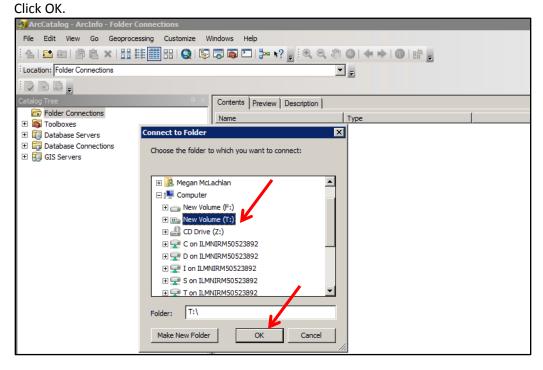


2. Then you should see the following main ArcCatalog window. Select the "Connect to Folder" icon in the ArcCatalog toolbar; you will be presented with the following dialog box.



3. Enter the desired REA folder using the following path and REA folder name provided in the table below: T:\REA\REA\_YEAR.

For example, the folder connection for the Colorado Plateau REA (acronym = COP) is T: $REA\COP_2010$ 

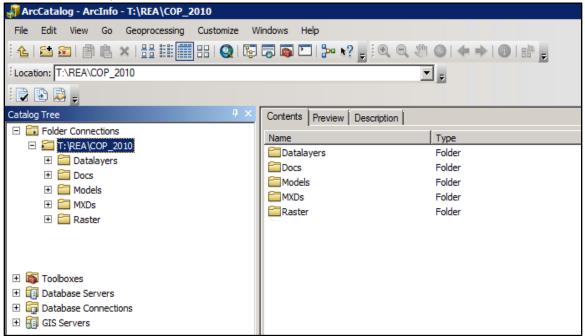


### List of REA Data Folders (they reflect the connection folders above)

Note: If data is not yet available for an REA, you will not be able to connect to the folder.

Central Basin and Range	CBR_2010	Northern Great Basin	NGB_2012
Chihuahuan Desert	CHD_2012	Northwestern Great Plains	NWP_2011
Colorado Plateau	COP_2010	Seward Peninsula	SNK_2010
Madrean Archipelago	MAR_2012	Sonoran Desert	SOD_2010
Middle Rockies	MIR_2011	Southern Great Plains	SGP_2012
Mojave Basin and Range	MBR_2010	Wyoming Basin	WYB_2012
North Slope	NOS_2012	Yukon Kuskokwim	YKL_2012

- 4. At this point you have added a data resource to ArcCatalog. NOTE: The content of your Catalog Tree may have additional and different connections than shown below. You can now expand these folders (e.g., Datalayers) and navigate to your chosen REA eco-region data (see next Step).
  - a. This folder connection gives you access to all data except vector data which are stored in an ArcSDE database which you will connect to in the next step.
  - b. To see non-spatial files such as Word documents of PDFs in the Docs folder, use the Windows Explorer applications. Or, to make them visible in ArcCatalog, go to the menu bar and click Customize, ArcCatalog Options, File Types tab, and click New Type... (such as .docx, .pdf, .xlsx).





REA data follow a particular naming convention as follows:

#### **ECO Category Status Subject Modifier Type**

For example, "COP\_AE\_C\_AlluvialAquifers\_poly" reads as:

COP = Colorado Plateau

AE = Aquatic Element

C = Current Status

Alluvial Aquifer

Polygon file

See the Appendix to this User Guide for all abbreviations used in naming data for the REAs.

5. **To access vector data**, you must connect to an ArcSDE database. In ArcCatalog click Database Connections, Add Spatial Database Connection. When prompted to enter the database information, fill in the following:

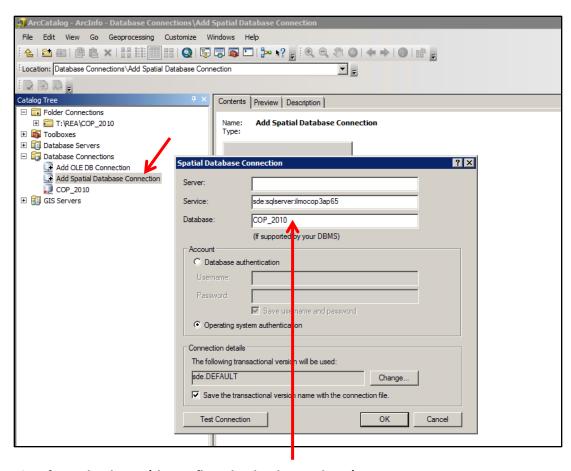
Server: [leave blank]

**Service:** sde:sqlserver:ilmocop3ap65

Database: [the name of you database such as "COP\_2010"; see table below]

**Select Operating system authentication** 

Click OK

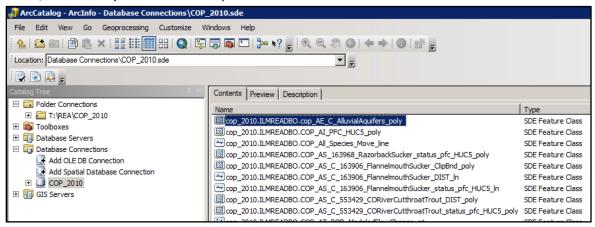


### List of REA databases (they reflect the databases above)

Note: If data is not yet available for an REA, you will not be able to connect to the database.

Central Basin and Range	CBR_2010	Northern Great Basin	NGB_2012
Chihuahuan Desert	CHD_2012	Northwestern Great Plains	NWP_2011
Colorado Plateau	COP_2010	Seward Peninsula	SNK_2010
Madrean Archipelago	MAR_2012	Sonoran Desert	SOD_2010
Middle Rockies	MIR_2011	Southern Great Plains	SGP_2012
Mojave Basin and Range	MBR_2010	Wyoming Basin	WYB_2012
North Slope	NOS_2012	Yukon Kuskokwim	YKL_2012

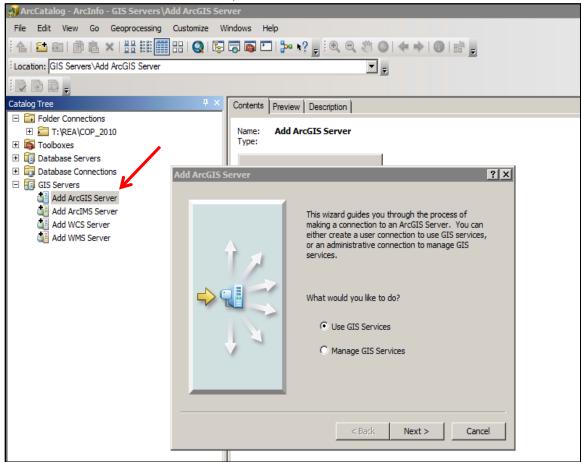
6. Once, connected you will see a comprehensive list of all vector data.



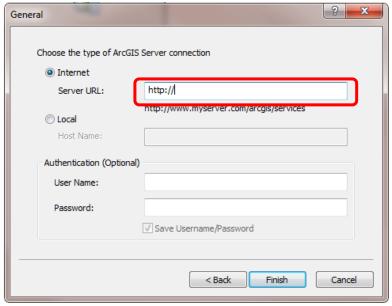
# **Connecting to REA Map Services in ArcCatalog**

Besides viewing map documents directly in ArcMap, you can also view maps as map services using the following steps:

- 1. Open a 10.0 ArcCatalog session
- 2. Click on GIS Servers in the Catalog Tree
- 3. Double-click Add ArcGIS Server
- 4. Select "Use GIS Services" radio button, click Next



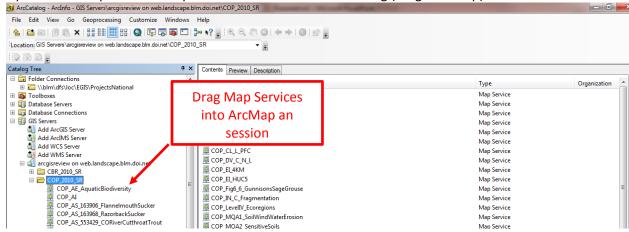
- 5. For the Server URL, enter: https://web.landscape.blm.doi.net/arcgisreview/services
  - a. NOTE: Copying and pasting this URL into an internet browser will not take you to a map services directory. You can only use this URL to make an ArcGIS Server connection and you must be logged into Remote Desktop to make the connection. Once an REA's data is released to the public, you will be able to access unsecured map services through ArcGIS.com using only an internet browser; this will accomplished using the *Public Map Services* link in a Map Catalog.



- 6. Click Finish
  - NOTE: A Security Alert dialog may appear: Click Yes. (This is a self-signed certificate from the internal ArcGIS server and should be safe behind the BLM firewall)

Note the new connection to the server in the right side detail panel.

- 7. Rename the connection if desired.
- 8. Expand the connection and then expand the folder for your desired REA eco-region. The map services should appear.
- 9. Open an ArcMap session and pull in the service from ArcCatalog (drag and drop).



For further reference, the link to ESRI below explains very well how to connect from ArcMap/ArcCatalog: <a href="http://resources.arcgis.com/en/help/main/10.1/index.html#//01540000047m000000">http://resources.arcgis.com/en/help/main/10.1/index.html#//01540000047m000000</a>

# Appendix: List of REAs and File Naming Conventions

## **List of REAs**

REA	3-Letter Code
Central Basin and Range	CBR
Chihuahuan Desert	CHD
Colorado Plateau	COP
Madrean Archipelago	MAR
Middle Rockies	MIR
Mojave Basin and Range	MBR
North Slope	NOS
Northern Great Basin	NBB
Northwestern Great Plains	NWP
Seward Peninsula	SNK
Sonoran Desert	SOD
Southern Great Plains	SGP
Wyoming Basin	WYB
Yukon Kuskokwim	YKL

## **File Naming Conventions**

Datasets should be named: ECO\_Category\_Status\_Subject\_Modifier\_Type

Model files should be named: ECO\_ModelType\_Description

The following charts provide **guidance** for naming vector, tabular and non-ESRI GRID image data sets for each of the categories. Please adhere to the naming rules for the first three elements (ecoregion abbreviation, category type, status) and the last element (data type) of the dataset name. Where possible, use the naming conventions below within the layer file for a particular ESRI GRID file.

The dataset subject and descriptor/modifier do not need to be in all CAPS. We recommend use of Camel Case so that the dataset name is easier to understand (i.e. ConiferMontane, MuleDeer\_WinterRange). Conjunctions can be eliminated from names. These naming conventions do not apply to ESRI GRIDS which have a 13-character limit.

Some datasets, especially those related to specific management questions, may be derived products that reference more than one subject. Use the primary subject of the question in determining where to place these datasets in the folder structure. For example, the management question is about how development change agents affect a particular conservation element. The primary subject here is the conservation element, so the data will reside in the CE folder. The MXD will have datasets from both the CE and CA folders. The layer file corresponding to this dataset will have a name (in the properties) that references the Management Question.

A list of suggested abbreviations is included at the bottom of this document. This is not an exhaustive list, and you are encouraged to use abbreviations appropriate for the data.

# **Conservation Elements/Change Elements/Attribute/Indicators**

Character space	Element values	Description & examples
1 (3)	MBR	Ecoregion abbreviation
	COP	
4 (1)	_	Underscore separating elements
5 (2 or 3)		Category Type
	AS	aquatic/riparian species conservation element
	AG	aquatic/riparian group conservation element
	AE	aquatic/riparian ecosystem conservation element
	TS	terrestrial species conservation element
	TG	terrestrial group conservation element
	TES	terrestrial ecosystem conservation element
	NV	Native Vegetation conservation element
	EI	Ecological Integrity conservation element
	DV	Development Change Agent
	CL	Climate Change Agent
	IV	Invasives Change Agent
	FI	Fire Change Agent

Character space	Element values	Description & examples
	IN	Indicator
	AT	Attribute
7 (1)	_	Underscore separating elements
8 (1)		<u>Status/Forecast</u>
	С	Current status
	N	Near-term forecast
	L	Long-term forecast
9 (1)	_	Underscore separating elements
10 (varies)		Subject name, abbreviation, or coded value
	175855	ITIS species taxonomic serial number, 175855 = Centrocercus urophasianus (greater sage grouse),
	40524	40524 = Bromus tectorum (cheat grass, cheatgrass, downy brome, early chess, military grass, wild
		oats)
	MigratoryBirds	Species Group
	Marsh	Ecosystem name or abbreviation
	TE	TE = Threatened & endangered species
	IBA	IBA = Important Bird Areas
	ALL	All, ALLT = All terrestrial (change agents), ALLA = All aquatic (change agents)
	TM	TM = Temperature, PRECIP = precipitation
	POP	POP = population (human), RDS = Roads, TRANS = all transportation, URB = Urbanization,
	OilGas	RE_Solar (renewable energy solar), OilGas = Oil & Gas, extractive = extractive industries
	_	Underscore separating elements
		<u>Descriptor/Modifier/Indicator/Attribute</u>
	SummerRng	Summer, Winter, Year-round range
	YrRndRng	Annual
	OccHab	Year (i.e. 2008)
	Footprint	Footprint, Corridor, Flyway
	DN	DN = density
	FR	FR = frequency
	Ext	Extent
	AVlow	AV = Average, AVlow = average low, AVhigh = average high,
	AVhigh	MIN = minimum, MAX = maximum
	_	Underscore separating elements
		<u>Data type</u>

Character space	Element values	Description & examples
	poly	Polygon
	pt	Point
	In	Line
	tbl	Tabular
	4km	4km raster
	HUC5	HUC5 polygons
	30m	30m raster or other equivalent (i.e. 90m, 100m, etc)

### Examples:

- 1. CBR\_TS\_C\_175855\_GRSG\_Occ\_Habitat\_poly (CBR Terrestrial Species Greater Sagegrouse current occupied habitat polygons)
- 2. MIR\_TG\_C\_SensitiveSoils\_HUC5 (MIR Terrestrial Group current sensitive soils by HUC)
- 3. SOD AE C 303d stream DN tbl (SOD Aquatic Ecosystem Current 303d stream density access database table)
- 4. SOD AE C ImpairedStream density huc5 (SOD aguatic ecosystem current impaired stream density by HUC)
- 5. COP\_DV\_C\_LCM (COP development current landscape condition model index)
- 6. MIR\_IV\_N\_40524\_DN\_poly (MIR near-term forecast density of invasive cheatgrass (Bromus tectorum) polygons)
- 7. MIR IV C ALL HUC5 (MIR All Invasives current status by HUC poly)
- 8. MIR IV C ALLA 4km (MIR All aquatic Invasives current status 4km raster)
- 9. CBR CL N TM AV (CBR climate change near-term forecasted average temperature)
- 10. NGB\_DV\_C\_ALL\_DIST\_4km (NGB all development current distribution 4km raster)
- 11. NGB\_DV\_C\_RDS\_DN (NGB development current road network density)

### **Models Documentation**

Model documentation should be named according to the following generic rules: ECO\_ModelType\_Description. <u>ECO</u> should correspond to the 3-character ecoregion abbreviation. <u>ModelType</u> should indicate the type of model (i.e. conceptual, geoprocessing, climate, species, ecological integrity, intactness, fragstats, MaxEnt). Description should reference what is being modeled using same name as used in dataset if relevant.

## Examples:

- 1. CBR\_Conceptual\_GtrSageGrouse (powerpoint with conceptual model for sage-grouse)
- 2. MIR\_Fragstats\_LandfireEVT (Fragstats report using LandFire Existing Vegetation Type)
- 3. WYB Maxent SageGrouse (maxent report for Sagegrouse in the Wyoming Basin)

## **ArcGIS Toolboxes**

Toolboxes, geoprocessing scripts, and ModelBuilder models can be named using Camel Case. If a particular Toolbox/Script/etc is specific to an ecoregion then use the three digit code. Use verbose text for describing ModelBuilder files and Python Scripts within a ToolBox.

# **Abbreviations Used in File Naming**

Abbreviation	Description
Lease	(current) leases
ALLA	all aquatic
ALLT	all terrestrial
TRANS	all transportation
AE	aquatic ecosystem CE
AG	aquatic group CE
Al	Aquatic Intactness
AS	aquatic species CE
AV	average
AvHigh	average high
AvLow	average low
AR	Avian richness
CL	climate CA
CV	Coefficient of Variance
COPMixedLowSagbrushShrubInd	Colorado Plateau Mixed Low Sagebrush Shrubland
CritHab	critical habitat
CryptogamicCrust	cryptogamic Crust
С	current status
std	data standard (BLM)
DN	density
DV	development CA
DSTNC	distance
DIST	distribution

EI	ecological integrity CE
CBR	ecoregion
COP	ecoregion
MBR	ecoregion
MIR	ecoregion
NGP	ecoregion
SOD	ecoregion
SPN	ecoregion
WYB	ecoregion
EmergentHerbaceousWetland	emergent herbaceous wetland
EXT	extent
FI	fire CA
ForestWoodland	Forest & Woodland
FR	frequency
FRQ	frequency
GR	grassland ecosystem
Grasslands	Grasslands
GRA	Grazing (development change agent)
GBFoothillLwerMontaneRiprnWdIndShrbIndStrm	Great Basin Foothill and Lower Montane Riparian Woodland and Shrubland/Stream
GBLakeReservoir	Great Basin Lake/Reservoir
GBPinyonJuniperWoodInd	Great Basin Pinyon-Juniper Woodland
GBSemiDesertChaparral	Great Basin Semi-Desert Chaparral
GBSpringsSeeps	Great Basin Springs and Seeps
GBXericMixedSagebrushShrubInd	Great Basin Xeric Mixed Sagebrush Shrubland
IBA	Important Bird Areas
IND	index
INT	intactness
ITIS	integrated taxonomic information system

IMBDesertWash	Inter-Mountain Basin Desert Wash
IMBActiveStabilizedDune	Inter-Mountain Basins Active and Stabilized Dune
IMBAspenMixedConiferForestWoodInd	Inter-Mountain Basins Aspen-Mixed Conifer Forest and Woodland
IMBBigSagebrushShrubInd	Inter-Mountain Basins Big Sagebrush Shrubland
IMBBigSagebrushSteppe	Inter-Mountain Basins Big Sagebrush Steppe
IMBCliffCanyon	Inter-Mountain Basins Cliff and Canyon
IMBCurlLeafMtnMahoganyWoodlandShrubland	Inter-Mountain Basins Curl-leaf Mountain Mahogany Woodland and Shrubland
IMBGreasewoodFlat	Inter-Mountain Basins Greasewood Flat
IMBMixedSaltDesertScrub	Inter-Mountain Basins Mixed Salt Desert Scrub
IMBMontaneSagebrushSteppe	Inter-Mountain Basins Montane Sagebrush Steppe
IMBPlaya	Inter-Mountain Basins Playa
IMBSemiDesertGrassland	Inter-Mountain Basins Semi-Desert Grassland
IMBSemiDesertShrubSteppe	Inter-Mountain Basins Semi-Desert Shrub-Steppe
IMBSubalpineLimberBristleconePineWoodInd	Inter-Mountain Basins Subalpine Limber-Bristlecone Pine Woodland
IV	invasives CA
LCM	landscape condition model
L	long-term forecast status
MR	macro-invertebrate species richness
MJMidElevMixedDesertScrub	Mojave Mid-Elevation Mixed Desert Scrub
MogollonChaparral	Mogollon Chaparral
NV	native vegetation CE
N	near-term forecast status
NAS	Nonindigenous Aquatic species
NAAridWestEmergentMarshAndPond	North American Arid West Emergent Marsh and Pond
NAWarmDesertBedrockCliffAndOutcrop	North American Warm Desert Bedrock Cliff and Outcrop
NAWarmDesertPavement	North American Warm Desert Pavement
NAWarmDesertBadland	North American Warm Desert Badland
OccHab	occupied habitat
Occi iau	occupied Habitat

OpenWater	open water
PRCNT	percent
PH	ph
PinyonPine	Pinyon Pine
POP	population (human)
PRECIP	precipitation
RNG	range
REC	Recreation (development change agent)
RE	renewable energy
RDS	roads
RMAlpineMontaneWetMeadowAlpineLake	Rocky Mountain Alpine-Montane Wet Meadow/Alpine Lake
RMAspenForestWoodland	Rocky Mountain Aspen Forest and Woodland
RMSubAlpineMontaneRiprnWdlndShrblndStrm	Rocky Mountain Subalpine-Montane Riparian Woodland and Shrubland/Stream
RMAlpineTurf	Rocky Mountain Alpine Turf
ShrubScrub	Shrub/Scrub
ErodableSoils	Soils of Conservation Concern (high erodability)
SP	solar potential
SparseVegetatedBarren	sparsely vegetated/barren
SA	species abundance
SMSemiDesertChaparral	Sonora-Mojave Semi-Desert Chaparral
SMCreosotebushWhiteBursageDesertScrub	Sonora-Mojave Creosotebush-White Bursage Desert Scrub
SonoraMidElevDesertScrub	Sonoran Mid-Elevation Desert Scrub
SMMixedSaltDesertScrub	Sonora-Mojave Mixed Salt Desert Scrub
StdDev	Standard Deviation
TM	temperature
TES	terrestrial ecosystem CE
TG	terrestrial group CE
TI	Terrestrial Intactness
TS	terrestrial species CE

TE	threatened & endangered species richness
URB	urbanization
VI	vegetation intactness
WQ	water quality
WoodyWetlandRiparian	woody wetland & riparian
YrRnd	year-round